Template name	Silica template						Imprinted polymer [b]				
	% C	ΔC (%)	% N	ΔN (%)	D_S [a] (μmol/m²)		% C	% N	S [c] (m^2/g)	V_p [c] (mL/g)	d_p [c] (nm)
					ΔC	ΔN					
APS-Si	4.28	4.11	1.65	1.65	3.85	4.00	-	-	-	-	-
BOC-Gly-Si	17.04	11.49	3.28	1.63	4.88	4.00	53.2	0.20	132	0.24	4.0
H-Gly-Si	6.24	0.69	2.21	0.56	0.84	1.17	51.5	0.24	145	0.41	7.4
FMOC-Phe-Gly-Si	16.44	10.25	2.93	0.72	1.17	1.81	59.3	0.26	166	0.27	4.5
H-Phe-Gly-Si	11.91	5.67	2.97	0.76	1.63	1.69	58.5	0.39	204	0.58	5.4
FMOC-Phe-Si	16.02	10.47	1.78	0.13	1.20	0.27	56.3	0.23	149	0.58	7.4
H-Phe-Si	9.94	4.39	1.91	0.26	1.23	0.54	55.3	0.15	200	0.53	8.2
FMOC-Phe//Si	-	-	-	-	-	-	56.7	0.80	205	0.37	5.1

Table 1 Characterization of the modified silica particles and the imprinted polymer beads by microanalysis and nitrogen sorption isotherms. Area density (D_S) of immobilised ligand was calculated based on the change in carbon (ΔC) or nitrogen (ΔN) content versus the preceding step. For example for ΔN: $D_S=m_N/(M_N S)$, where $m_N=\Delta N\%/(100-\Delta N\% M_w/M_N)$, M_w=molecular weight of the coupled ligand, M_N=weight of nitrogen per mole of coupled ligand and S= surface area of the silica support ($S=350 m^2/g$).

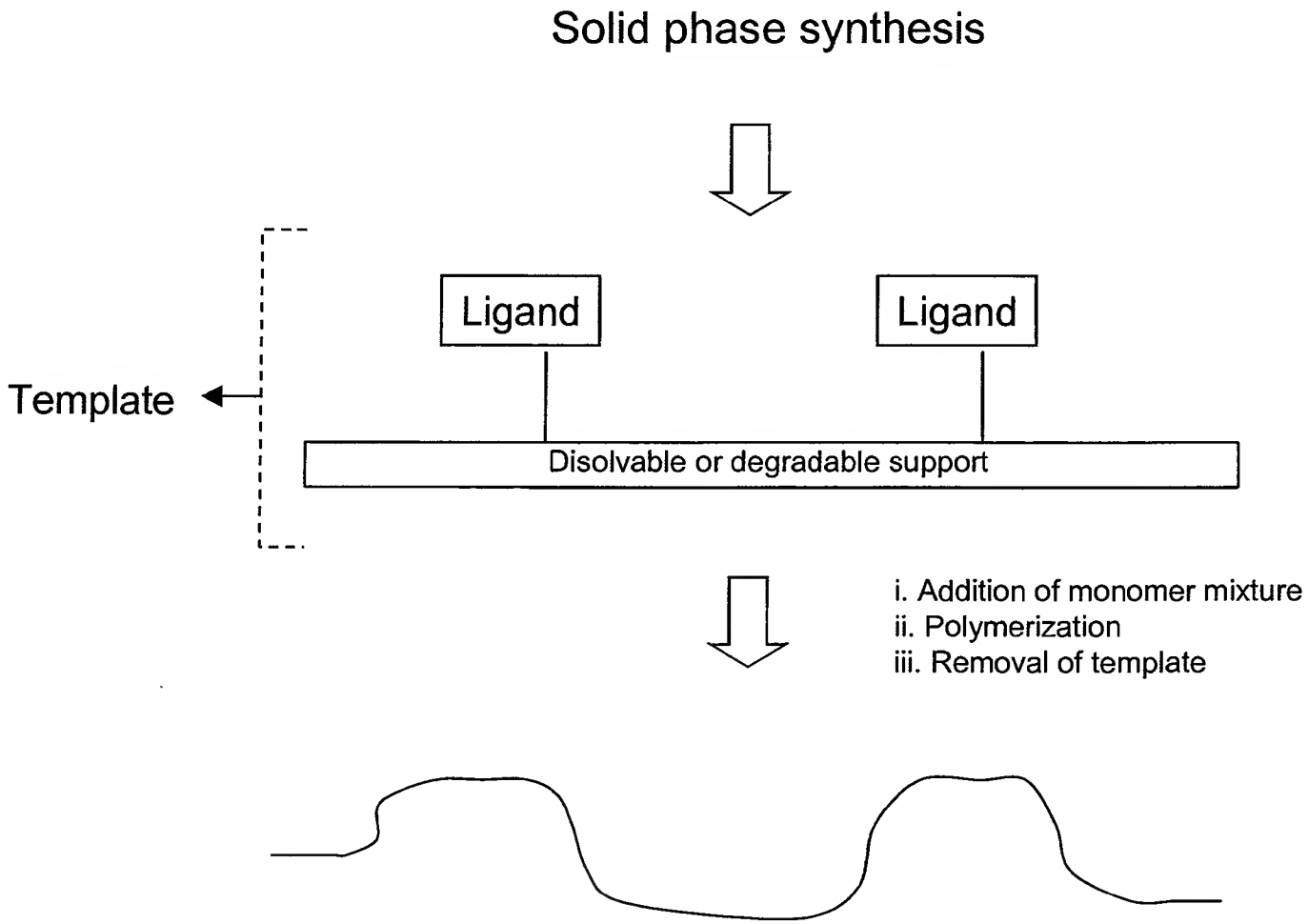
Solid phase synthesis
Ligand
Ligand
Template
Disolvable or degradable support
i. Addition of monomer mixture
ii. Polymerization
iii. Removal of template
Polymer containing surface imprints complementary to ligand

FIG. 1

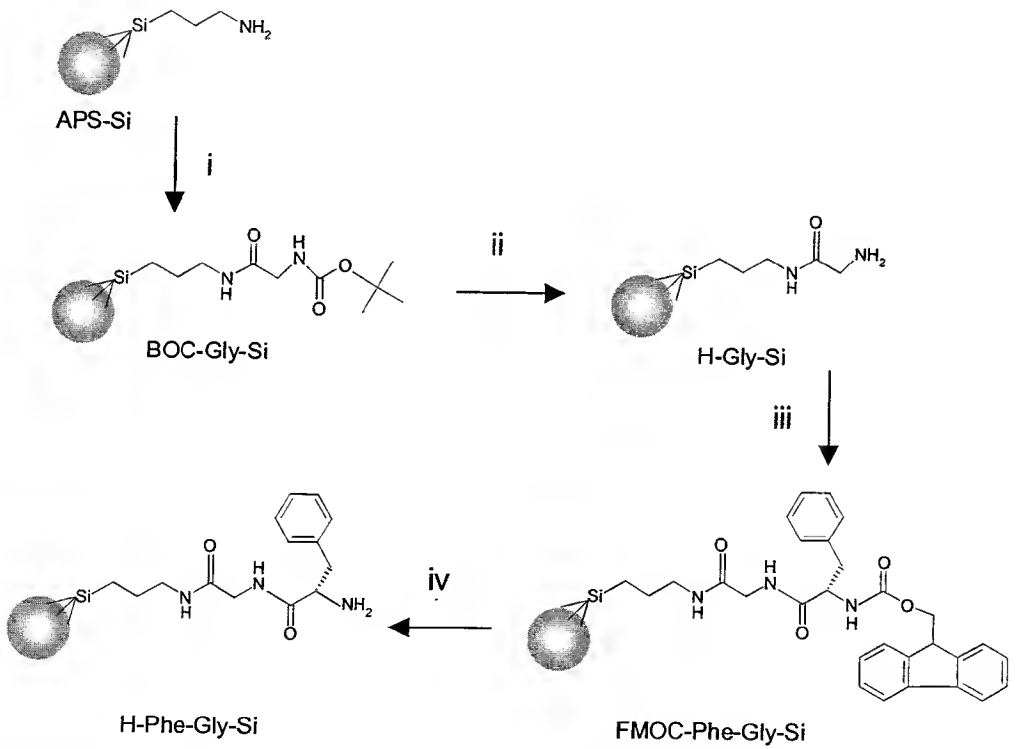

FIG. 2

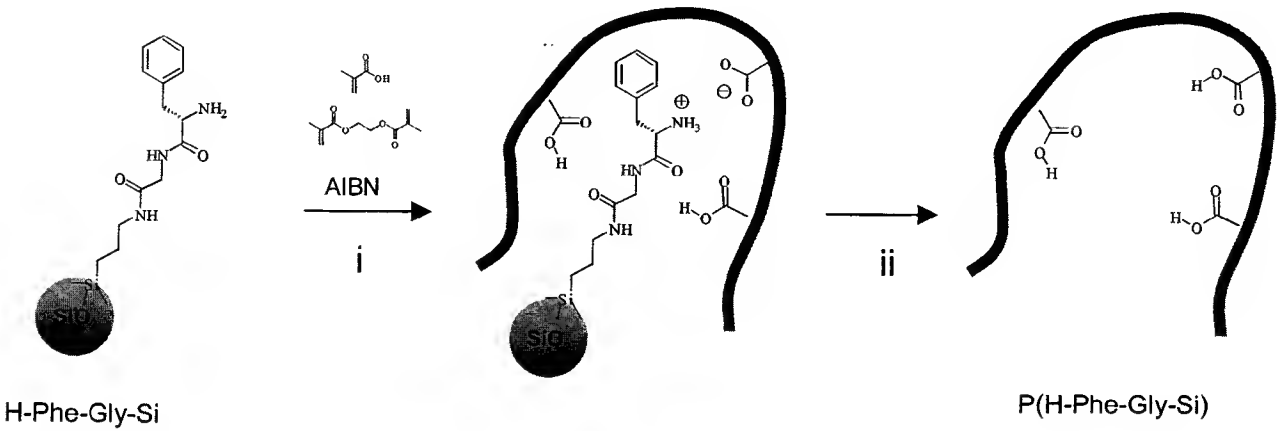

FIG. 3

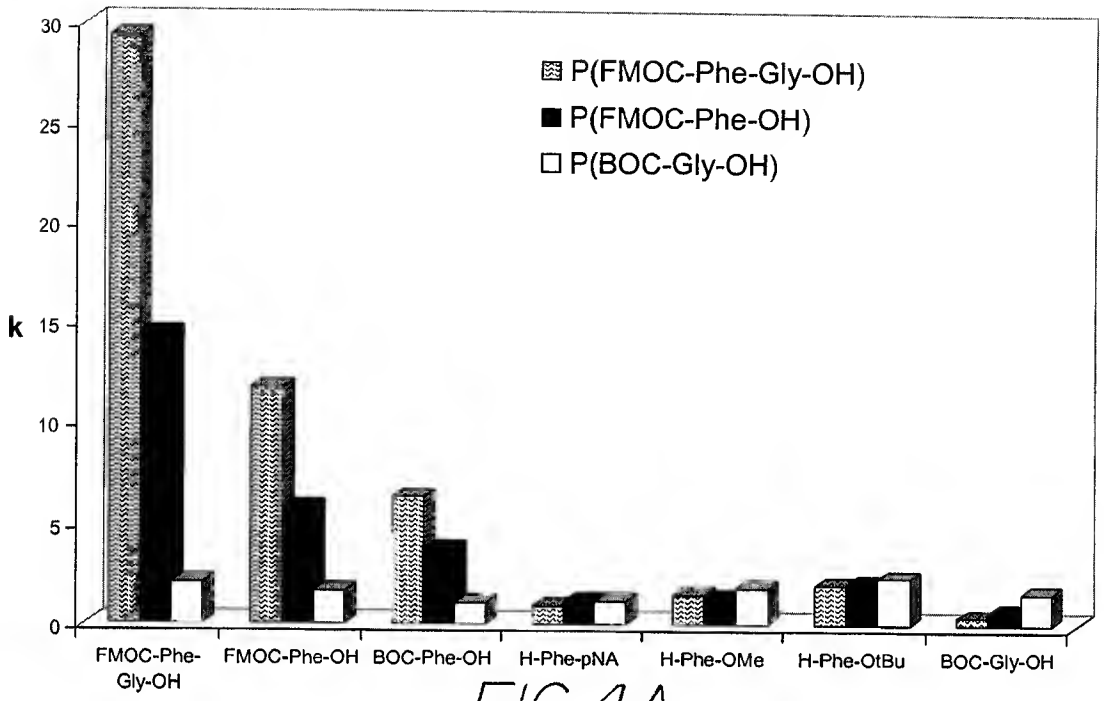
30
25
20
k 15
10
5
0
P(FMOC-Phe-Gly-OH)
P(FMOC-Phe-OH)
P(BOC-Gly-OH)
FMOC-Phe-Gly-OH
FMOC-Phe-OH
BOC-Phe-OH
H-Phe-pNA
H-Phe-OMe
H-Phe-OtBu
BOC-Gly-OH

FIG. 4A

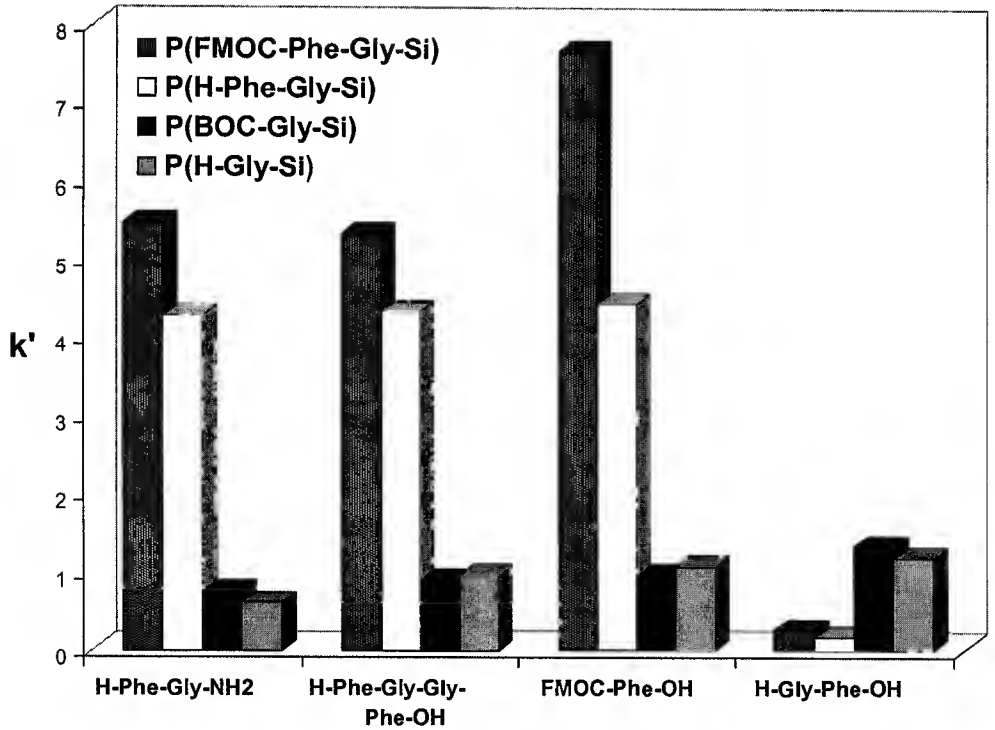
8
7
6
5
k' 4
3
2
1
0
P(FMOC-Phe-Gly-Si)
P(H-Phe-Gly-Si)
P(BOC-Gly-Si)
P(H-Gly-Si)
H-Phe-Gly-NH2
H-Phe-Gly-Gly-Phe-OH
FMOC-Phe-OH
H-Gly-Phe-OH

FIG. 4B

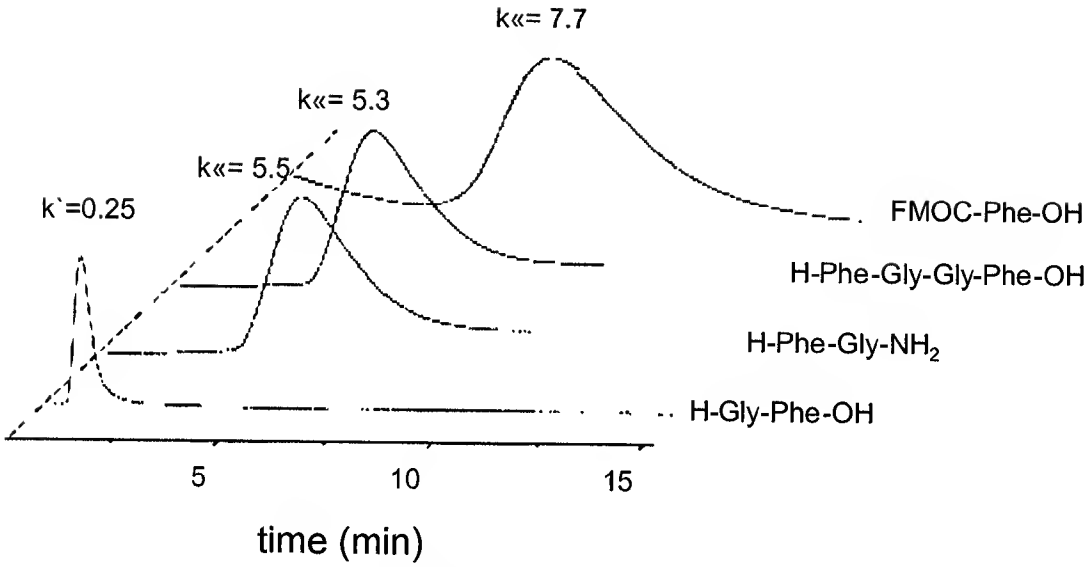
k«= 7.7
k«= 5.3
k«= 5.5
k`=0.25
FMOC-Phe-OH
H-Phe-Gly-Gly-Phe-OH
H-Phe-Gly-NH2
H-Gly-Phe-OH
5
10
15
time (min)

FIG. 4C